

**APPARATUS FOR SUBSTANTIAL REMOVAL OF ORGANIC SUBSTANCE(S)
AND/OR NITROGEN SOURCE(S) FROM AN AQUEOUS MEDIUM**

ABSTRACT

5 Described is an apparatus for the removal of organic substances and/or nitrogen sources from an aqueous medium by exposing the aqueous medium to the action of microorganisms supported on a gas permeable, water impermeable layer, or on and/or in a three dimensional microbial support layer, that is proximate a gas delivery layer through which gas, preferably, oxygen-containing gas, is supplied to the gas permeable layer such
10 that it diffuses through the gas permeable layer and is supplied to the microorganisms.